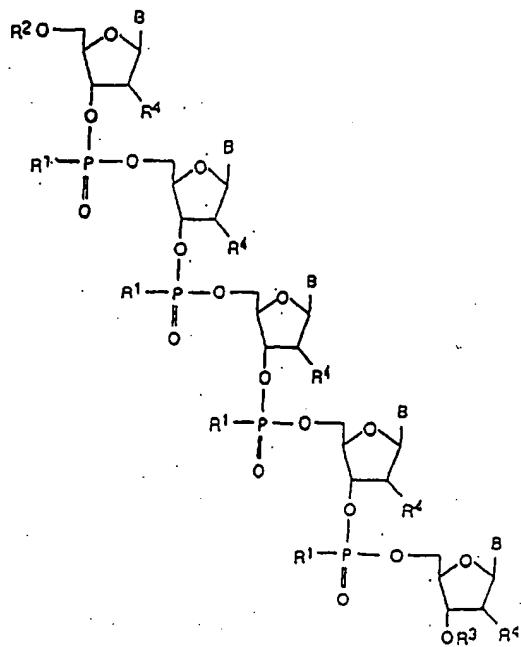


This listing of claims will replace all prior versions, and listings, of claims in the application.

In the Claims:

1. (CURRENTLY AMENDED) An antisense oligonucleotide selected from the group consisting of [[-]] the sequence 5'- TTG CAT AAA CCC AAG GAG – 3' (SEQ ID NO: 1) and modifications thereof, and a [[-]] fragment having at least 8 nucleotides of the sequence 5'- TTG CAT AAA CCC AAG GAG – 3' (SEQ ID NO: 1) and modifications thereof.
2. (CURRENTLY AMENDED) The antisense-oligonucleotide according to claim 1 wherein the modification ~~concerns one or more of the sugar moieties, the bases and/or the internucleotide linkages and/or comprises a modified sugar moiety, a modified base, a modified internucleotide linkage, and/or coupling the oligonucleotide to an enhancer of uptake and/or inhibitory activity, and combinations thereof.~~
3. (ORIGINAL) The antisense-oligonucleotide according to claim 2 wherein the antisense-oligonucleotide is a phosphorothioate oligodeoxynucleotide.
4. (CURRENTLY AMENDED) The antisense-oligonucleotides according to claim 1 with the ~~respective~~ structure:



wherein

[-] B = the bases A, C, G or T in oligodeoxy-ribonucleotides or accordingly the bases A, C, G or U in oligo-ribonucleotides;

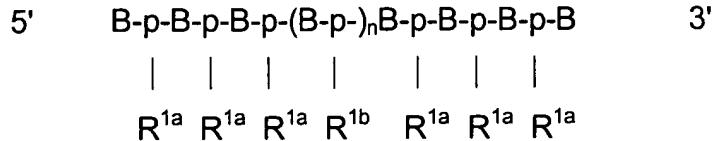
[-] R¹ = O⁻M⁺ (M⁺ = Na⁺ or H⁺), S⁻M⁺ (M⁺ = Na⁺ or H⁺), CH₃, C₂H₅, OCH₃, or OC₂H₅;

[-] R² and/or R³ are covalently coupled cholesterol, poly(L)lysine, transferrin or H;

[-] R⁴ = H, F, CH₃, C₂H₅, OH, OCH₃, or OC₂H₅;

and wherein the structure is to be understood as a detail out a representation of a longer nucleotide chain.

5. (CURRENTLY AMENDED) The antisense oligonucleotides according to claim 1 with the formula



wherein

B = the bases A, C, G or T in oligodeoxy-ribonucleotides, or accordingly the bases A, C, G or U in oligo-ribonucleotides;

p = internucleotide phosphate;

(B-p-)_n = an oligodeoxy-ribonucleotide or oligo-ribonucleotide stretch wherein

n= 1 – 12, preferably 1-11;

and wherein R¹, referred to as encompassing R^{1a} or R^{1b}, is varied at the internucleotide phosphates within one oligonucleotide[[::]] wherein

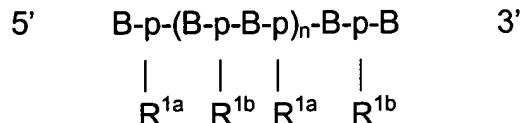
R^{1a}= S⁻M⁺, wherein all M⁺ is Na⁺ or H⁺ and R^{1b}= O⁻M⁺, wherein all M⁺ is Na⁺ or H⁺; or

R^{1a}= CH₃ and R^{1b}= O⁻M⁺, wherein all M⁺ is Na⁺ or H⁺; or

R^{1a}= S⁻M⁺, wherein all M⁺ is Na⁺ or H⁺S and R^{1b}= CH₃; or

R^{1a}= CH₃ and R^{1b}= S⁻M⁺, wherein all M⁺ is Na⁺ or H⁺.

6. (CURRENTLY AMENDED) The antisense oligonucleotides according to claim 1 with the formula



wherein

B = one of the bases A, C, G or T comprised in oligodeoxy-ribonucleotides or accordingly one of the bases A, C, G or U comprised in oligo-ribonucleotides depending on a gene sequence;

p = internucleotide phosphate;

(B-p-B-p)_n = an oligodeoxy-ribonucleotide or oligo-ribonucleotide stretch wherein n= 2 – 8, preferably 3–7;

and wherein R¹ is alternated at the internucleotide phosphates within one oligonucleotide[[::]] wherein

R^{1a}= S⁻M⁺, wherein all M⁺ is Na⁺ or H⁺ and R^{1b}= O⁻M⁺, wherein all M⁺ is Na⁺ or H⁺; or

R^{1a}= CH₃ and R^{1b}= O⁻M⁺, wherein all M⁺ is Na⁺ or H⁺; or

R^{1a}= S⁻M⁺, wherein all M⁺ is Na⁺ or H⁺S and R^{1b}= CH₃.

7. (CURRENTLY AMENDED) Use of the antisense-oligonucleotides according to claim 1 for at least one of the inhibition of expression and/or functional activity of melanoma inhibitory activity (MIA), and/or reducing invasion and/or metastasis, and/or or stimulating immune cells and/or the immune system.

8. (ORIGINAL) A pharmaceutical composition comprising an antisense-oligonucleotide according to claim 1.

9. (CURRENTLY AMENDED) The pharmaceutical composition according to claim 8 wherein the antisense-oligonucleotide is integrated into a DNA delivery system comprising viral and/or non-viral vectors together with lipid acids or derivatives thereof selected from the group consisting of anionic lipids, cationic lipids, non-cationic lipids, and mixtures thereof.

10. (CURRENTLY AMENDED) The pharmaceutical composition according to claim 8 further comprising ~~additionally~~ an immunostimulatory agent.

11. (CURRENTLY AMENDED) The pharmaceutical composition according to claim 10 wherein the ~~additionally~~ immunostimulatory agent is selected from the group consisting of cytokines, inhibitors of expression and/or function of interleukin-10, inhibitors of expression and/or function of transforming growth factor beta (TGF- β), inhibitors of expression and/or function of Prostaglandin B2, inhibitors of expression and/or function of receptors for Prostaglandin E2, and/or inhibitors of VEGF, and combinations thereof.

12. (CURRENTLY AMENDED) The use of the pharmaceutical composition according to ~~one of the claims 8-11~~ claim 8 in a method for the preparation of a medicament prevention and/or the treatment of at least one of neoplasms, infections, or immuno-suppressive disorders.

13. (CURRENTLY AMENDED) The use of the pharmaceutical composition according to ~~one of the claims 8-11~~ claim 8 in a method for the preparation of a medicament prevention and/or the treatment of at least one disorder[[s]], neoplasm[[s]], infection[[s]], and/or or immunosuppressive disorder[[s]] ~~wherein~~ wherein abnormal expression of MIA plays a role in the disorder, neoplasm, infection, or immunosuppressive disorder.

14. (CURRENTLY AMENDED) The use of the pharmaceutical composition according to ~~the claims 8-11~~ claim 8 in a method for the preparation of a medicament prevention

[[or]] and/or the treatment of neoplasms and/or disorders selected from the group consisting of melanoma, gastrointestinal carcinoma, breast cancer, pancreatic cancer, [[ovarian]] ovarian carcinoma, chondrosarcoma, spinal diseases, cervical myelopathy, lumbar canal stenosis, lumbar disc herniation, rheumatoid arthritis, osteoarthritis, HLA-27-associated oligoarthritis, psoriatic arthritis, [[and]] rheumatic arthritis, cartilage damage, [[or]] joint destruction, and combinations thereof.

15. (CURRENTLY AMENDED) A diagnostic composition comprising an antisense-oligonucleotide according to ~~one of the claims 1-7 either claim 1 or claim 2.~~

16. (NEW) The composition of claim 5 wherein $(B-p-)_n$ = an oligodeoxy-ribonucleotide or oligo-ribonucleotide stretch wherein n= 1 – 11.

17. (NEW) The composition of claim 6 wherein $(B-p-B-p)_n$ = an oligodeoxy-ribonucleotide or oligo-ribonucleotide stretch wherein n= 3 – 7.